

Extrait du Rhuthmos

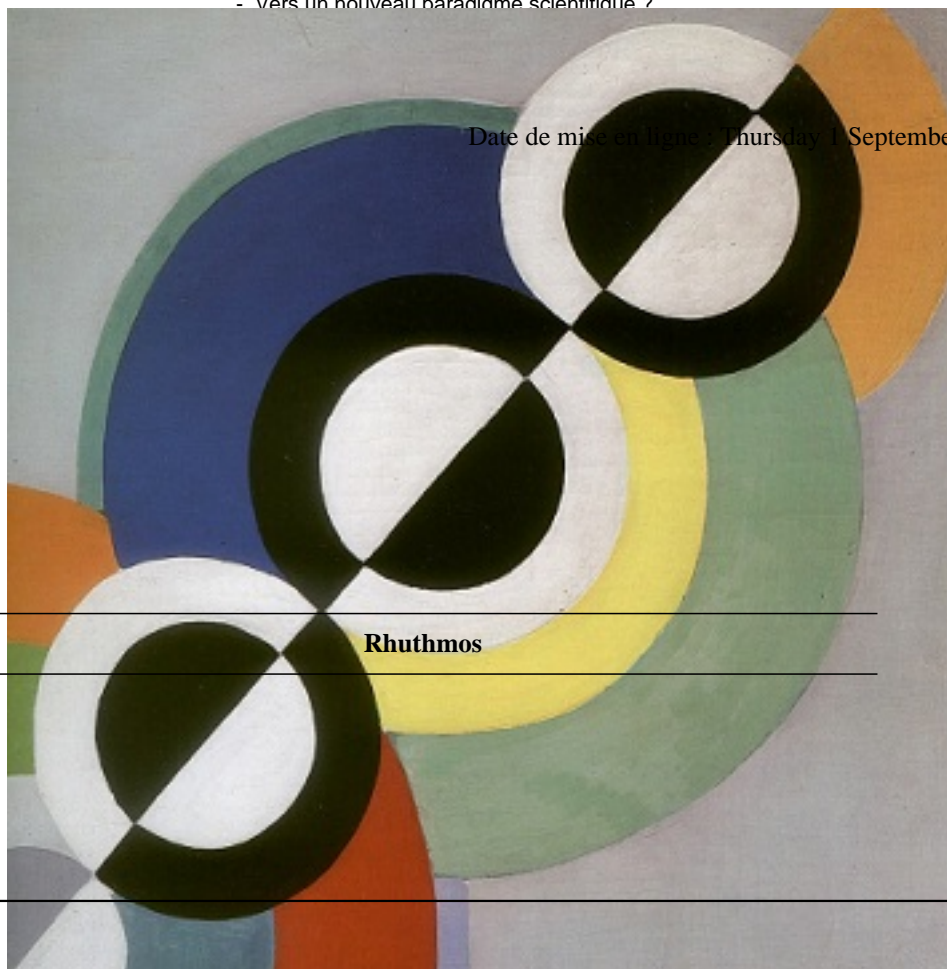
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Christian Rhythm at the End of Antiquity (4th - 6th cent. AD) - part 6

- Recherches

- Vers un nouveau paradigme scientifique ?

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Rhuthmos

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Rhythm as Law of the Creation - Augustine's *De musica*, 6

As expected, the last words of the *De musica* are for God, the *Creator omnium*. As in his analysis of the soul, Augustine's description tends first to emphasize the neo-Platonic side. Rhythm emanates from the One and therefore are endowed with regularity, symmetry and order.

Rhythm has its principle in the One. It derives its beauty from regularity and similitude, its arrangement from order [*Numerus autem et ab uno incipit, et aequalitate ac similitudine pulcher est, et ordine copulatur*]. (*De musica*, 6.17.56, my trans.)

But, in order to oppose the common philosophical rejection of any *ex nihilo* creation, he immediately adds to this vision, which remains philosophical and emphasizes the immobility and timelessness of God, a more practical view, drawn from *Genesis*, comparing God *creator omnium* to a craftsman. Like a craftsman whose skills are rhythmic incorporations kinds of Maussian "techniques of the body" (see Michon, 2015b and 2016) God created the world according to rhythms which were consubstantial with him. In this view time becomes again central.

Master. So! A craftsman can, thanks to the rational rhythms pertaining to his art [*rationabilibus numeris qui sunt in arte eius*], develop those sensible rhythms according to which he is used to work [*sensuales numeros qui sunt in consuetudine eius operari*], and thanks to the sensible rhythms [*sensualibus numeris*], these progressive rhythms [*progressores illos*] which he uses to move his members when he works [*quibus membra in operando movet*] and fit the divisions of time [*ad quos iam intervalla temporum pertinent*]; he can, I say, realize with wood visible shapes which fit eurhythmically the divisions of space [*locorum intervallis numerosas*]; Nature itself, which obeys the commands of God, can grow wood from earth and other elements [*et caeteris elementis*] and God could not have brought forth these very elements from nothingness? (*De musica*, 6.17.57, my trans.)

Augustine envisages two kinds of *numeri*, the first in time, the others in space. Here the translation of *numerus* as "number" is particularly misleading. It makes the text become odd and obscure. Since numbers are not *essentially* different in space or time, it is rather difficult to understand why those in time should be considered as preceding those in space. By contrast, the primacy given to the *temporales numeri* makes sense if we translate *numeri* as

rhythms. "It is necessary that rhythms in time precede rhythms in space" means that the second are only extensions of one single rhythmic principle which animates the whole universe as a life power.

Master. It is necessary that rhythms in time precede rhythms in space [*locales numeros, temporales numeri antecedant necesse est*]. Look for instance at a tree. Among the plants there is none to be seen that, in the intervals of time required for its maturity, does not grow, produce jets, develop in the air, spread its foliage, fortify itself, and bear either fruits or seed destined to reproduce it by virtue of mysterious movements which take place in the wood itself. This law is even more apparent in the bodies of animals, where the members present a more regular symmetry. Should these marvels concern the elements, they could not have been created from nothing? (*De musica*, 6.17.57, my trans.)

What is the principle of extension or space *res extensa* in Cartesian terms asks Augustine, if not "the supreme and eternal source of rhythms, similitude, regularity and order," i.e. that particular time without metrics, that unmeasured and unnumbered time, which is consubstantial with God and which we can find within ourselves by the "distension of the soul."

Master. What then is the principle of this dimension which develops from point to volume? What is the principle of this analogy of parts in a solid, produced by length, breadth, and depth? What is the principle of this analogy [*corrationalitas*], of that relation which brings out, in an exact proportion, the length of the geometrical point, the width of the length, the depth of the breadth? What is its principle, if not the supreme and eternal source of rhythms, similitude, regularity and order [*nisi ab illo summo atque aeterno principatu numerorum et similitudinis et aequalitatis et ordinis veniunt*]? (*De musica*, 6.17.57, my trans.)

The last lines of the *De musica* are quite extraordinary. They describe, one more time, a rhythmic pyramid. At the bottom we find the "*rhythms in space*." Then, going up, come the "*rhythms in time*." Then "the movement of life" which "does not have distributed intervals of time in its rhythms" but "has the power to rule over the things in time." Then, above these "*rhythms of life*," come the "*rational and intellectual rhythms of the blessed and holy souls*." And finally, above all those rhythmic creatures comes "the Lord of the universe" whose *rhythmic law* communicates back, without any intermediary, "with the rational and intellectual rhythms, which in turn transmit it to those that rule the earth and the underworld." From bottom to top and top to bottom, the universe is a rhythmic creation created by a rhythmic god. Rhythm is not anymore a metric emanation but the very unmetric law of the Creation.

Master. Now the elements which we distinguish by the ministry of the senses, with all the objects they contain, can neither take on nor keep these rhythms in space [*locales numeros*], [...] without an anterior and secret influence of the temporal rhythms which are in motion [*nisi praecedentibus intimis et in silentio temporalibus numeris qui sunt in motu*]. Likewise, these rhythms [*illos*], which unfold with agility in the divisions of time [*temporum intervallis*], are formerly modified by the movement of life [*vitalis motu*], which in turn depends only on the Lord of the universe, and which does not have distributed intervals of time in its rhythms [*non temporalia habens digesta intervalla numerorum suorum*] but has the power to rule over the things in time [*sed temporalia ministrante potentia*]. Above these rhythms of life [*supra quam*] come the rational and intellectual rhythms [*supra quam rationales et intellectuales numeri*] of the blessed and holy souls [*beatarum animarum atque sanctarum*]. The law of God [*legem ipsam Dei*] that law without which a leaf does not fall from a tree and according to which our hair is counted (Mt., 10.30) communicates without any intermediary with these rhythms, which in turn transmit it to those that rule on the earth and the underworld [*ad terrena et inferna*]. (*De musica*, 6.17.58, my trans.)

With this very well balanced theological system, Augustine wants to challenge the pagan philosophers who reject the idea of *ex nihilo* creation. The Creation is possible because God is rhythm and the proof is the overall presence of the latter in his Creation. Any spatial *numerositas* that occurs in nature for instance a beautiful tree which has, as Hopkins will say, a particular "inscape" (see next vol.) presupposes a general temporal rhythm the rhythm of germination, growth and maturation which, in turn, is governed by a higher rhythmic law, that God shares with the blessed and holy souls who are already close to him.

Rhythm as Number - Boethius' *De institutione musica* (ca. 510 AD)

At the beginning of the 6th century, the Western Roman Empire has disappeared and has been replaced by new Romano-Germanic states. Italy is now under the rule of the Ostrogoths and one of their most famous king, Theodoric the Great (454 - 523 AD).

The concept of music, as reshuffled in Augustine's reflection, is appropriated by one of the last Roman and Christian philosophers, Anicius Manlius Severinus Boëthius (c. 480 - 524), who will pass it on to the Middle Ages and the Renaissance not without substantially transforming its meaning.

As his predecessor, in his *De institutione musica* (ca. 510), which will become the fundamental text for the study of *musica* within the *quadrivium* throughout the entire Middle Ages and late into the Renaissance, Boethius puts particular emphasis on *numeri*. However, whereas Augustine thought of *numeri* as rhythms as much as numbers, Boethius makes the latter come to the foreground and the former recess into the background.

Faithful to the anti-empiricism and anti-materialism of his predecessor, Boethius introduces his study of music by presenting a hierarchical threefold division of those who might be named "musicians": instrumentalist (or performers) (*cantor*), poets (or composers), and those who adjudicate performers and composers. Only those in the last class are true musicians (*musicus*), for only this class is concerned with knowing, through reason, the fundamental essences which determine the value of performances and compositions. Composition and performance, which were central to Aristotle, are now considered as degraded art forms and, as a matter of fact, are not taken into account (C.M. Bower in Christensen, 2008, p. 146; see also *The Routledge Companion to Philosophy and Music*, 2011, voc. Boethius).

In the same neo-Platonic spirit as Augustine, music is used to propose a hierarchical view of the world, Boethius' famous threefold division between *musica mundana* (the highest and purest kind of music), *musica humana* (the intermediary kind) and *musica instrumentalis* (the lowest and degraded kind). The first concerns the macrocosmic harmony of the universe the motion of the planets and the periodic repetition of the four seasons. The second concerns the microcosmic harmony of the body and the soul the disposition of the four humors and temperaments. The last one concerns the sounding harmony of "songs" made by singers and instrumentalists. (Thomas Christensen, 2008, p. 3)

Finally, Boethius re-actualizes the common neo-Platonic ethical perspective. The goal of learning music is not to play an instrument, like for Aristides, nor even to sing in church, like for Ambrose, but to "transcend cursory sensory experience," to know "the essences expressed in ratios pervad[ing] every level of being" and then to "ascend to the level of reason."

Boethius's justly famous divisions of music and musicians link him most closely with the Platonic tradition of musical thought: the essences expressed in ratios pervade every level of being, and by coming to know these essences even in the corporeal world of sound the mind is able to transcend cursory sensory experience and rise to a higher level of knowing; it is reminded of these essences as it comes to know its own being and as it studies nature and the cosmos. The goal of learning *musica* is to ascend to the level of reason. The fundamental principle motivating Platonic music theory is *knowing*, the acquisition of pure knowledge, and Boethius's threefold division of music and three classes of musicians resonate consistently with that principle. (C.M. Bower in Christensen, 2008, p. 146-147)

All these philosophical features are quite close to Augustine's. But something has changed during the last century which pushes Boethius to radicalize his neo-Platonic stand. Power has become heavier than ever. It asks now for total submission and leaves no room for political expression nor even for private life. As a matter of fact, this transformation is going to be fatal to Boethius, who, after being arrested and charged with conspiracy, will be executed.

Of course, more personal reasons may also account for Boethius' radicalization. Whereas Augustine's reflection was still guided by a strong knowledge and appreciation of grammar, rhetoric and metric, Boethius shows little interest for these liberal arts and is much more attracted by logic, astronomy and mathematics, to which he devotes a particular treatise: *De institutione arithmetica*.

Both changes account for the twist given to the neo-Platonic idealism and its transformation into a kind of generalized neo-Pythagoreanism. The whole universe is now considered by Boethius as having been generated "according to the system of numbers."

All that has been built by nature in its first age appears to have been formed according to the system of numbers [*Omnia quaecumque a primaeva natura constructa sunt, numerorum videntur ratione formata*]. (*Institutio Arithmetica*, 1.2 - quoted in Spitzer, 1963, n. 34, p. 158, my trans.)

The whole knowledge is consequently divided according to the various aspect of mathematics.

Four areas of study were thus defined by the very nature of quantity: *arithmetic* pursued number in and of itself; *music* examined number in ratios and proportions; *geometry* considered immobile magnitudes; *astronomy* investigated magnitudes in motion. (C.M. Bower in Christensen, 2008, p. 142)

This new philosophical framework explains why musical and poetic rhythm, which were still central to Ambrose and Augustine, are entirely overlooked in Boethius' theory of music in favor of harmony. The three types of "music" are united, he claims, by "*harmonia*," i.e. proper concordance of magnitudes and multitudes. Numbers and proportions are the "final cause" of any harmonious activity. Music becomes the study of numbers and proportions in all its macrocosmic and microcosmic manifestations, for which reason it will often be called "harmonics" in the Middle Ages.

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